RESOURCE CONSERVATION AND RECOVERY ACT HANDLERS ASSESSMENT

For:

University of Illinois - Chicago
CHICAGO, ILLINOIS
ILD 984906198

PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
FEDERAL SITES REMEDIATION SECTION
SITE ASSESSMENT UNIT

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Introduction

On September 26th, 2000 the Illinois Environmental Protection Agency's (IEPA) Site Assessment Program was tasked by the Region 5 offices of the United States Environmental Protection Agency (U.S.EPA) to undertake an initial assessment of a number of Resource Conservation and Recovery Act (RCRA) facilities within the State. These facilities are presently contained within the RCRA database but are not subject to RCRA's corrective action authorities and are currently referred to as RCRA "handlers". This RCRA Handlers Assessment Report is designed to identify facilities, which may pose a threat to human health or the environment, and to determine if the continued placement of these facilities on the Comprehensive Environmental Response, Compensation, and Liability Inventory System (CERCLIS) is warranted.

Site Description and History

In the initial phase of the RCRA Handlers Report the author conducted a review of the IEPA Bureau of Land file for the University of Illinois – Chicago (UIC). The address given for the site is 1110 South Paulina Street in Chicago, Illinois. The UIC Environmental Health and Safety Office is located at the Paulina Street address.

The UIC has two physically separate campuses that encompass approximately 183 acres on the south side of the City of Chicago. The area around both campuses is a mixture of residential and commercial properties. Approximately five blocks physically separate the UIC main campus (east) and hospital campus (west). The

University of Illinois - Chicago has operated as an institution of high learning since 1896 under various names. There is no available file information regarding activity at the properties prior to 1896. Hazardous, radioactive, infectious, and mixed wastes are generated at various university locations. Educational, research, and medical laboratory activities are those primarily responsible for waste generation. Smaller quantities of waste are generated at the physical plant that UIC operates and maintains at the hospital campus.

On May 8, 2001, a representative from the IEPA Site Assessment Unit conducted a site reconnaissance of the UIC campuses. Upon arrival at UIC the IEPA representative met with UIC Health and Safety managers. During the meeting the daily university operations that result in waste generation and the nature of the RCRA Handlers Assessment were discussed. Upon conclusion of the meeting the IEPA representative conducted a visual inspection of the campus solid waste management units (SWMUs) and associated areas of concern. The Health and Safety managers accompanied the IEPA representative during the visual inspection.

The visual inspection revealed that all former and present SWMUs are located indoors on concrete floors. Most areas in which liquid waste is stored were also surrounded by secondary containment and some storage units also had dry sumps in order to contain material in the event of a spill. No visual evidence of spills in areas where liquid waste is stored was observed during the site reconnaissance. Some of the SWMUs detailed in a 1993 Preliminary Assessment/Visual Site Inspection

(PA/VSI) conducted by a U.S. EPA contractor are no longer used and have gone through RCRA closure.

In 1980, UIC notified the U.S. EPA of their status as a generator of hazardous waste. In 1989, UIC submitted a Part A permit application for status as a storage facility. The SWMUs are located at various points on both campuses. These storage units include Mixed Waste Storage which is composed of radioactive and infectious waste, lab packs, solvents, and flammables. Generally, all identified SWMUs used to contain or store hazardous waste at UIC appear to be sound based upon visual observation. As indicated earlier, many of the SWMUs that were detailed in the 1993 PA/VSI are no longer in use.

Pathway Analysis

The City of Chicago obtains drinking water from surface water intakes located on Lake Michigan. Some private wells can still be found in Chicago, but they are used primarily for industrial purposes. There is no record in the IEPA Bureau of Land file for the University of Illinois – Chicago of a release to the groundwater pathway having occurred due to any activities at the school or hospital. It would seem that there is a low potential for targets to have been impacted via the groundwater pathway.

The nearest perennial surface water body is Lake Michigan which is located approximately two miles east of the UIC campuses. Based upon a map review and

visual observation of the area topography it would appear that there is no direct overland route from the site to any surface water body. Any site run off most likely enters the surrounding storm sewer system. All of the SWMUs are located inside of buildings so the likelihood of contaminant migration via the surface water pathway is essentially non-existent.

There is a low probability of exposure to hazardous waste via the soil pathway. All of the SWMUs at UIC are located indoors and on concrete floors. All university operations that produce waste take place indoors as well. A small area of stained soil was observed outside of one of the buildings during the 1993 PA/VSI. Any visual or physical evidence of this area of stained soil no longer exists due to the construction of new pilings for the elevated train that runs through the west campus. Locked doors and the physical presence of the university employees that either use or manage the hazardous materials restrict general public access to the SWMUs.

There is no record in the IEPA BOL file of a complaint from any neighboring residences or businesses regarding emissions from UIC. At the time of the 1993 PA/VSI the campus operated an incinerator licensed by the Illinois Department of Nuclear Safety to dispose of radioactive waste. The incinerator is no longer in use. There was also a fly ash collection unit in place at the physical plant at the time of the PA/VSI. The unit was enclosed and it was ascertained at that time that the potential for a release via the air pathway was low. The fly ash unit is no longer operable as the physical plant now utilizes turbines to generate power for UIC.

Conclusions and Recommendations

Given the limited potential of contaminants from either UIC campus entering the environment via one of the established migration or exposure pathways the IEPA has determined that this facility should continue to be regulated under federal RCRA authorities, and be archived from the Comprehensive Environmental Response Compensation and Liability Act's Information System database or the subject of any additional CERCLA investigative activities. This assessment has determined that any environmental concerns at this facility are not of a magnitude that would warrant CERCLA Removal or Remedial attention at this time.